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EXAMINER

FINEMAN, LEE A

ART UNIT PAPER NUMBER

2872

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/056,868

Applicant(s)

BENDALL ET AL. 

Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 88,89,91-129 and 135-166 is/are pending in the application.
- 4a) Of the above claim(s) 160 and 162-166 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 88,89,91-129,135-159 and 161 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/19/05 &amp; 1/6/06</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 January 2006 has been entered in which claims 88-89, 91-129, 135-137, 143, 148-150 and 152-154 were amended, claims 159-166 were added and claims 4, 41-43, 47, 49, 80-82, 84, 86-87, 90 and 130-134 were cancelled. Claims 88-89, 91-129 and 135-166 are pending.

### ***Election/Restrictions***

2. Newly submitted claims 160 and 162-166 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

- I. Claims 88-89, 91-129, 135-159 and 161, drawn to a stereo endoscopic system, classified in class 359, subclass 464. Note: Although claims 135-158 and 161 are process claims, they are directed only to structure in the apparatus and therefore are grouped with the apparatus.
- II. Claims 160 and 162, drawn to a stereo endoscopic system, classified in class 600, subclass 462.
- III. Claims 162-165, drawn to a method of accurately positioning an onscreen cursor, classified in class 345, subclass 619.

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3. Inventions III and (I and II) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another and materially different apparatus like one without a refractive image splitting device or one without a probe.

4. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, the claims of Invention I evidence that the combination does not rely on the details of Invention II for patentability. For example, Invention II does not require a refractive image splitting device.

5. These inventions are distinct for the reasons given above. Further, the searches required for Groups I-III are not coextensive and these inventions have acquired a separate status in the art because of their separate classification and/or recognized divergent subject matter. Therefore, restriction for examination purposes as indicated is proper.

6. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

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on the merits. Accordingly, claims 160 and 162-166 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Claim Objections*

7. Claim 102 is objected to because of the following informalities: Regarding claim 102, "said probes" lacks antecedent basis. It is unclear whether "said probes" refers to said plurality of detachable probe tips or said probe of the independent claim. For the purposes of examination it will be taken to be as said plurality of detachable probe tips. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 88-89, 92-93, 159 and 161 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyano et al., US 5,840,014 in view of Kweon et al., US 6,411,327 B1.

Regarding claims 89, 92, 159 and 161, Miyano et al. disclose an endoscopic system (figs. 1 and 2) comprising: an endoscopic probe (1), an electronic imaging device (7); and an optical system (6), including at least one focusing lens (5A), each of said electronic imaging device and said optical system being housed within said probe (fig. 1) and arranged entirely along a single optical axis (fig. 1). Miyano et al. disclose the claimed invention except for the endoscope being a stereo endoscope with said optical system including a refractive image splitter and said at least

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one focusing lens disposed between said electronic imaging device and said refractive image splitter, wherein said refractive image splitter directly passes an image of an object of interest to be split along said single optical axis into two images of said object that are guided through said refractive image splitter entirely along said single optical axis to said at least one focusing lens without optical power between the object of interest and said at least one focusing lens, said two images being representative of first and second acquired stereo images of said object of interest that are focused by said at least one focusing lens along said single optical axis onto said electronic imaging device, . Kweon et al. teach in figs. 1-3 a stereo camera system (10) including an optical system with a focusing lens and an electronic imaging device (within 11, see column 4, lines 48-50) and a refractive image splitter (12), which is a prism, and wherein said at least one focusing lens disposed between said electronic imaging device and said refractive image splitter (fig. 1), wherein said refractive image splitter directly passes an image of an object of interest to be split along said single optical axis into two images of said object that are guided through said refractive image splitter entirely along said single optical axis (see figs. 1-3) to said at least one focusing lens without optical power between the object of interest and said at least one focusing lens (there is only the prism which has no optical power), said two images being representative of first and second acquired stereo images of said object of interest, which are symmetrical, and that are focused by said at least one focusing lens along said single optical axis onto said electronic imaging device (figs. 3A-3C and column 5, lines 22-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the camera system (i.e., electronic imaging device (7); and an optical system (6)) of Miyano et al with the stereo camera system of Kweon et al. to make the endoscope a stereo endoscope and

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therefore provide three-dimensional images, i.e. depth to the internal objects, and be better able to visualize fine irregularities on those objects. The method of utilizing the structure of the claim is inherent therein.

Regarding claim 88, Miyano et al. in view of Kweon et al. further disclose wherein the views of said first and second acquired stereo images converge at a given object distance such that said views overlap 100% at said object distance (Kweon et al, figs. 3A-3C and column 5, lines 22-26).

Regarding claim 93, Miyano et al. in view of Kweon et al. further disclose a window (11, Miyano) disposed between said image splitter and said object, wherein contact is prevented between external media and said image splitter

10. Claims 91, 94-96, 98-99, 101-116, 125-129, 135-147 and 152-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyano et al. in view of Kweon et al. as applied to claim 159 and 161 above, and further in view of Sakiyama et al., US 6,063,023.

Regarding claim 91, Miyano et al. in view of Kweon et al. as applied to claim 159 above further disclose wherein said refractive image splitter is contained within a distal tip (1A, Miyano) of said probe. Miyano et al. in view of Kweon et al. disclose the claimed invention except for the tip being detachable. Sakiyama et al. teach a device for viewing an object with a probe (figs. 4 and 5) wherein a image splitter (21, 22) is contained within a detachable distal tip (4, column 6, lines 55-56) which is usable with said probe (figs. 4 and 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tip

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detachable as taught by Sakiyama et al. to be able to quickly change tips for different imaging needs (column 2, lines 27-31, Sakiyama).

Regarding claim 94-96, although Miyano et al. in view of Kweon et al. as applied to claim 159 above disclose a system for creating images, they do not explicitly disclose a display for viewing said first and second acquired stereo images as detected by said electronic imager; wherein only one of said acquired stereo first and second acquired stereo images is displayed; and further comprising a viewing means for viewing said first and second acquired stereo images such that said first image goes to a right eye of a viewer and left image goes to a left eye of said viewer, wherein said viewer is provided with a three dimensional perspective. Sakiyama et al. teach a stereo endoscopic system (fig. 1) including a display (14) for viewing said first and second acquired stereo images as detected by said electronic imager (see figs. 23A and 23B); wherein only one of said acquired stereo first and second acquired stereo images is displayed (fig. 24B and column 17, lines 15-20); and further comprising a viewing means for viewing said first and second acquired stereo images such that said first image goes to a right eye of a viewer and left image goes to a left eye of said viewer, wherein said viewer is provided with a three dimensional perspective (column 17, lines 57-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the display and viewing means of Sakiyama et al. to the system of Miyano et al. in view of Kweon et al. to be able to easily view the stereoscopic images produced.

Regarding claims 98-99, 101-107, 109-110, 112, 135-143 and 145, Miyano et al. in view of Kweon et al. as applied to claim 159 and 161 above disclose the claimed invention except for further comprising a measurement means with an optical character set including optical mapping



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distortion, magnification at one or more object target distances and parallax information, for comparing parameters of said first and second acquired stereo images so that measurement data of said object are determined, wherein said measurement data includes at least one geometric characteristic of said object; wherein said device receives and uses one of a plurality of detachable distal probe tips, wherein each of said probe tips has a corresponding optical character data set and wherein data determined from said image is used to select which optical characteristics data set corresponds to said detachable tip in said probe; wherein the optical characteristics data set is adjusted said probe is operable in a medium with an index of refraction other than air; wherein the optical characteristics data set is stored in non-volatile memory; and further comprising a calibration means for generating said optical characteristics data set of said device, wherein said calibration means includes a plurality of object target points which appear in both of said first and second acquired stereo images when viewed with said probe; wherein said plurality of object target points comprises at least two object target points with known spacing between them at a first object target distance and at least two object target points with known spacing between them at a second target distance, wherein a distance between said first and second object target distances is known and wherein one of said first and second object target distances is known and includes using a reflection of illumination of at least one known object target distance and a means for color balancing. Sakiyama et al. teach a measurement means (figs. 8-13) with an optical character data set (S104) including optical mapping distortion, magnification at one or more object target distances and parallax information (column 6, lines 15-21) and for comparing parameters of said first and second acquired stereo images so that measurement data of said object are determined, wherein said measurement data includes at least

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one geometric characteristic of said object (length, column 12, lines 10-16 and lines 47-60); wherein said device receives and uses one of a plurality of detachable distal tips (4, column 6, lines 55-56) making a plurality of probes, wherein each of said probe tips has a corresponding optical character data set and wherein data determined from said image is used to select which optical characteristics data set corresponds to said detachable tip in said probe (column 6, lines 1-53); wherein the optical characteristics data set is stored in non-volatile memory column 6, lines 9-14); and further comprises a calibration means (figs. 6A, 6B, 7A, 7B) for generating said optical characteristics data set of said device, wherein said calibration means includes a plurality of object target points which appear in both of said first and second acquired stereo images when viewed with said probe (column 7, lines 61-column 9, lines 42) wherein said plurality of object target points comprises at least two object target points with known spacing between them at a first object target distance and at least two object target points with known spacing between them at a second target distance, wherein a distance between said first and second object target distances is known and wherein one of said first and second object target distances is known (fig. 7A) and includes using a reflection of illumination of at least one known object target distance (in so far as an image is a reflection of illumination) and a means for color balancing (column 9, lines 36-42 and column 11, lines 14-20 with column 14, lines 56-58, in so far as the color must be balances to compare the luminance). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the measuring means, calibration means and detachable tips with optical characteristics data sets of Sakiyama et al. in the system of Miyano et al. in view of Kweon et al. to be able to quickly and accurately measure different specific characteristics of the object. Further, regarding claims 112 and 140, it would have been obvious

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to one having ordinary skill in the art at the time the invention was made to adjust the optical characteristics data set so the probe is operable in a medium with an index of refraction other than air, since it is been held that discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to adjust the data set for the purpose of providing accurate data for calibration and measurement when using different probes. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) See also *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 108 and 144, Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claims 103 and 137 above, disclose the claimed invention but do not explicitly state whether detection of the plurality of object target points are automatic. It would have be obvious to one having ordinary skill in the art at the time the invention was made to automate the detection of the plurality of object target points since it has been held that broadly providing a mechanical or automatic means to replace manual activity which accomplishes the same result involves only routine skill in the art. One would have been motivated to automate the detection of the plurality of object target points in order to more quickly establish calibration of the images. *In re Venner*, 262 F.2d, 91, 95, 120 USPQ 193, 194 (CCPA 1958)

Regarding claims 111, 129 and 158, Miyano et al. in view of Kweon et al. and Sakiyama et al. as applied to claims 98, 99 and 135 above, do not explicitly state that the optical characteristics data set, the first and second acquired stereo images and said determined measurements are stored in a single file. Official Notice is taken that storing many different values in a single file is well known. It would have been obvious to one having ordinary skill in the art at the time the invention was made to store the optical characteristics data set, the first and

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second acquired stereo images and said determined measurements in a single file to consolidate memory space and provide easy data manipulation. It is noted as directed by the MPEP 2144.03 that if the applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). As such, the above official notice statement of the examiner is now held to be admitted prior art.

Regarding claim 113-116, 146-147 and 152-154, Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claims 98 and 135 above, further disclose wherein said measuring means includes matching means (Sakiyama, figs. 14A, 14B, 19 and 20, column 13, line 24-column 14, line 4) for automatically matching a same user-designated point (PP1, PP2) viewed on said object in each of said first and second acquired stereo images and means for requesting user selection of a correct matched point from a plurality of automatically-identified possible matches (Sakiyama, column 14, lines 35-40, in so far as when the correlation is smaller than a given value, the user can manually pick a match from the small area being viewed, which is a plurality of possible matches) and determining an overlap region of the images in which measurement are performed (column 14, lines 4-16). Regarding claim 116, for each point picked the matching will occur (figs. 14A, 14B).

Regarding claims 125-126 and 155-156, Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claims 98 and 135 above, further disclose wherein said measuring means includes means for indicating a measurement accuracy of said measurement (Sakiyama, column 14, lines 35-37) and wherein said measuring means includes mean for an operator to designate a maximum estimated error limit above which said device indicates a warning

(Sakiyama, column 14, lines 35-40, in so far as coefficient of normalization correlation is below a given value which must have been designated by at least the first operator).

Regarding claim 127-128 and 157, Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claim 98 above, further disclose wherein said measuring means includes using at least one onscreen cursor (Sakiyama, column 17, lines 29-30) and a menu bar (Sakiyama, 64, fig. 23B) but does not explicitly state whether a symbol, which indicates both a type of measurement being performed and a role of said cursor in said type of measurement and wherein at least one measurement point designated by a user when performing one type of measurement is kept event when a different type of measurement is selected. Graphic User Interface (GUI) systems that use menus, symbols and cursors and “point and click” selections allow the user to quickly navigate the monitor’s images/windows and perform tasks in an easy to understand way are well known to one of ordinary skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the system of Miyano et al. in view of Kweon et al. and Sakiyama et al. a GUI system to allow the user easy understanding and navigation of the monitor’s images/windows, including the “point and click” technology which would hold a measurement point while changing tasks.

11. Claims 100, 117-120, 122-124 and 148-151 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claim 114 above, and further in view of Hori et al., US 6,191,809 B1.

Regarding 117-119, 122-124 and 148-151 Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claim 114 and 147 above disclose the claimed invention except for

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said automatic matching means including a global alignment means for performing an automatic global alignment of said first and second acquired stereo images and including a means for determining vertical and horizontal shifts between the first and second acquired stereo images; wherein the data derived from said global alignment means is used to make automatic matching faster and reduce a probability of incorrect matches of subsequent user-defined points. Hori et al. teaches a stereoscopic device (fig. 1) that includes global alignment means for performing an automatic global alignment of said first and second acquired stereo images (column 5, lines 43-54) and including a means for determining vertical and horizontal shifts between the first and second acquired stereo images (figs. 9A and 9B, column 7, line 6-column 7, line 49). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the global alignment means of Hori et al. in the system of Miyano et al. in view of Kweon et al. and Sakiyama et al. to further correct for any visual image misalignment. Also, regarding claims 122 and 123, the addition of the global alignment means would reduce the probability of incorrect matches of subsequent user-defined points and make the matching faster because the acquired stereo images would already be visually more aligned and less calculations would be necessary. Regarding claim 124, the data from the global alignment means would be incorporated into the position of the images for determining overlap as stated above with regard to claim 154.

Regarding claim 100, Miyano et al. in view of Kweon et al., Sakiyama et al. and Hori et al., as applied to claim 117 above disclose the claimed invention except for a difference between said optical characteristics data set and the global alignment data being determined and signaling a user. It is well known to one of ordinary skill in the art to compare variables within a system to

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ensure the accuracy of the data in the system and to further notify the user of the results. It would have been obvious to one of ordinary skill in the art at the time the invention was made to compare said optical characteristics data set and the global alignment data to verify the accuracy of the data and to further notify the user of a difference to be able to correct any problems quickly.

Regarding claim 120, Miyano et al. in view of Kweon et al., Sakiyama et al. and Hori et al., as applied to claim 117 above disclose the claimed invention but are silent as to whether the points used in the global alignment process are user-designated matched points or automatically determined points. Since either set of points yields the same results, it would have been obvious to one of ordinary skill in the art at the time the invention was made use any of the above sets of matching points in order to provide correct input data for the global alignment process.

12. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyano et al. in view of Kweon et al. and Sakiyama et al., as applied to claim 127 above, and further in view of Kashiwagi et al., US 6,037,939.

Miyano et al. in view of Kweon et al. and Sakiyama et al. as applied to claim 127 above except for wherein at least one portion of said first and second acquired stereo images is displayed at a different magnification relative to the displayed first and second images and wherein both said at least one portion and at least one of said first and second acquired stereo images are displayed simultaneously, said at least one portion containing said onscreen cursor for aiding in the real-time positioning of same. Interactive manipulation of image data is well known. For example, Kashiwagi et al. teach having an image (see figs. 23-28) wherein a portion

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of that image (81c) is displayed at a different magnification than the image (fig. 28) and both are displayed simultaneously (fig. 28), said at least one portion containing said onscreen cursor for aiding in the real-time positioning of same (figs. 23-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the interactive manipulation of image data as taught by Kashiwagi et al. to the system of Miyano et al. in view of Kweon et al. and Sakiyama et al. to be able to refer to or edit more detailed data and/or graphics (Kashiwagi, column 2, lines 11-14). It is noted that when this image manipulation is done to one or both images on the screen as shown in figs. 23A or 24A, then both said at least one portion and at least one of said first and second acquired stereo images are displayed simultaneously.

13. Claim 121 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyano et al. in view of Kweon et al., Sakiyama et al. and Hori et al., as applied to claim 117 above, and further in view of Ko, US 5,710,428.

Miyano et al. in view of Kweon et al., Sakiyama et al. and Hori et al., as applied to claim 117 above disclose the claimed invention except for wherein a correction by a user of an incorrect automatic match automatically invokes said global alignment means. Automated feedback loops that include user override are well known for providing automatic control over a variable while still being able to correct for unforeseen problems. For example, Ko uses an automatic feedback loop to correct the image displayed in the system (column 2, lines 43-52) as well as a user override to provide even better images when needed (column 2, lines 53-60). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention



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was made to use a user override within the automatic system of Miyano et al. in view of Kweon et al., Sakiyama et al. and Hori et al. to correct for unforeseen problems like an incorrect match.

### *Response to Arguments*

14. Applicant's arguments with respect to claims 97, 159 and 161 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

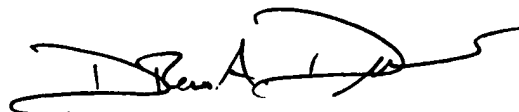
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
LAF

March 15, 2006



**DREW A. DUNN**  
**SUPERVISORY PATENT EXAMINER**